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ABSTRACT

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CONCEPTUALIZING ORGANIZATIONAL CLIMATES

BENJAMIN SCHNEIDER

Research Report No. 7

May, 1974

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Part I of this paper presents some logical and conceptual distinctions between job satisfaction and organizational climate, the former being viewed as micro, evaluative, individual perceptions of personal events and experiences the latter as macro, relatively descriptive, organization level perceptions that are abstractions of organizational practices and procedures. Part II proposes a formal definition of climate as meaningful perceptions (concepts) people share and which function to help adapt people to their organization. The Structuralism, Functionalism and Gestalt schools of psychology were each

reviewed and the implications of each school for the definition of climate and climate research methods and theory were indicated. Perhaps the most interesting "finding" was a hypothesis derived from Functionalism on the impact of an organization's "climate for individual differences" on individual attribute - individual performance relationships. Some conditions leading to a "climate for individual differences" in which individual differences in performance should be predictable were identified.

CONCEPTUALIZING ORGANIZATIONAL CLIMATES[1]

Benjamin Schneider

University of Maryland[2]

The attention recently accorded the general topic of organizational climate is impressive. It seems like each month brings a new paper on climate in at least one of the important journals in Industrial-Organizational Psychology, Management, Administrative Sciences, and Organizational Behavior. New reviews of the literature are being published (Hellriegel & Slocum, 1974) a chapter in the Handbook of Industrial-Organizational Psychology (Dunnette, 1974) will be devoted to, or at least give major attention to, the concept (Payne & Pugh, 1974) and Guion (1973b) referenced the topic in his Presidential Address to the Division of Industrial-Organizational Psychology of the Americal Psychological Organization.

In their review, Hellriegel and Slocum (1974) suggested that "the primary criticism of the construct [organizational climate] seems to exist at the operational rather than the conceptual level." However, it will be argued here that since operationalization presupposes conceptualization, it is precisely at the conceptual level where the problems lie. Thus, while Hellriegel and Slocum (1974) find 57 recent articles utilizing climate as a central concept (independent, mediating, or dependent variable) there are still few, if any answers being proposed to such questions as:

(a) How is climate the same or different from job satisfaction? The point of view to be presented here suggests that when conceptual definitions

exist for both concepts, measures used to assess climate and satisfaction will have different foci and will employ different units of analysis. The supposed overlap in such measures, it is argued, is a function of the inadequate prior conceptualization of both concepts rather than a function of re-inventing the satisfaction wheel (Guion, 1973a, 1973b). Some conceptual and methodological distinctions between climate and job satisfaction constitute the focus of Part I of this paper.

(b) What is the psychological nature and function of climate perceptions? Here the interest lies in answering two questions: What constitutes a climate perception - of what is it composed and how is it formed? The second question is: What function in people's work lives does having climate perceptions serve? These issues are addressed in Part II of this paper by seeking answers in three "schools" of psychology. Gestalt and Structuralism help provide answers about the nature of climate perceptions while the implications flowing from Functionalism suggest a new way of thinking about person-environment interaction and the prediction and understanding of individual behavior in organizational settings.

Part I: Some Distinctions[3]

There are three topics that may be conceptually and empirically related among which some distinctions should be made: Organization structure, organizational climate, and job satisfaction.

Preliminary Distinctions

Structure has referred to properties and processes of organizations that exist without regard to the human component of the system. Such elements as size, product, manufacturing process, hierarchical structure, number of levels, and so forth (Forehand & Gilmer, 1964; Porter & Lawler, 1965) seem to be employed to describe the structural characteristics of organizations.

The concept of job satisfaction has been based on an interaction hypothesis, an interaction of what exists in the job environment and some system of personal needs and values (Locke, 1974). There should be in job satisfaction, then, some idea about what is right or wrong, good or bad, just or unjust; job satisfaction research, as an extension of attitude research, has been oriented to an evaluation of conditions. From the point of view of attitude research (e.g., Fishbein, 1967) climate research is conceptually similar to the beliefs people hold about an organization while job satisfaction should be more of an evaluation of the organization, of the conditions existing in the organization, or of the outcomes one receives from the organization.

Climate, then, has referred to the perceptions employees have of work and organizational conditions. Generally these perceptions have been of properties of organizations less tangible than structure, or inferences about organizations based on structural properties (Dieterly & Schneider, 1974). The perceptions have been abstractions of conditions, properties and practices of the organization. Indeed in some cases, measures seem also to include attributions about the inferred motives of an organization. Thus Pritchard and Karrasick (1973) have suggested that their climate measure indicates the "value-orientation" of

an organization. In the sense that a perception of the whole is based on an abstraction of the parts climate research has been similar to the person-perception literature; those interested in climate research have assumed that individuals perceive elements of the whole and, on the basis of these elements, develop a perception of their organization (c.f. Sells, 1968; Taguiri, 1968).

An organization's structural characteristics may be viewed as one of the antecedents of both climate and satisfaction. For example, structural characteristics may suggest to people some of the enduring patterns of behavior which will be encountered in the organization (Payne & Pheysey, 1971). It seems then that structural properties of organizations may be used as information people integrate into a theme which suggests something to them about how an organization functions (Sells, 1968). Dieterly and Schneider (1974) find for example that position level in the organization in the absence of any other information about the organization is reflected in the kind of climate perceptions people have. Payne and Mansfield (1973) and Schneider and Bartlett (1970) also report position differences in perceptions of the climate of the work setting as do Hall and Schneider (1973).

While job satisfaction may involve the perception of the same external work world involved in climate perceptions, as an evaluation job satisfaction necessarily implies an interpretation of the perception in terms of some personal system of needs or values. For climate, perceptions may be organized into a characteristic or theme of the organization; for satisfaction, the perceptions may be organized into a theme representing the state of the individual.

By referencing the perceptions of organizational conditions to some internal system of values, the result is a summary of the person rather than a summary of the organization; satisfaction of the person not characteristic of the organization.

This summarizing of the affective state of the person is precisely the logic underlying the overwhelming proportion of attitude research because it served as the guiding theme for the development of techniques for the assessment of attitudes.

> "Even though the attributes of attitudes were still being debated, Thurstone noted that all theorists and researchers agreed that attitudes possessed an affective quality which included the properties of directionality (positive and negative) and extremity... He set about constructing procedures for measuring individual differences on that hypothesized single-dimensional continuum.... Attitude measurement theorists who followed Thurstone (e.g., Guttman, 1944; Likert, 1932) accepted this dimensional analysis of attitudes and the prepotence of the evaluative characteristic" (Ostrom, 1968, p.7). Italics mine.

While other theorists and researchers made further distinctions about the components of attitudes (e.g., Fishbein, 1967; Lewin, 1935; Osgood, Suci & Tannenbaum, 1957; Smith, 1947) the prepotence of the evaluative component, of the referencing to some internal state of the individual, has remained. Indeed, in the industrial context this emphasis on the evaluative component has been so overwhelming as to result in the ideas of attitude research and job

satisfaction research to be inseparable; the very word "satisfaction" equates such research with affect.

Another difference between climate and satisfaction follows from the affective versus descriptive distinction - climate refers to a qualitative characteristic of an organization which, once identified, can be thought of in terms of amount. Thus an organization does not have X amount of climate, it has X amount of a (or, probably, more than one) climate of a particular kind. Conversely, with job satisfaction, amount is an inherent idea; one need not specify what kind of satisfaction one is speaking about. In this Part of the paper this question of amount of climate will arise again when we consider the appropriate unit of analysis for climate research. In Part II the topic will become important as a background for a formal definition of climate.

Climate and Satisfaction: A Working Framework

Figure 1 presents a framework for being more specific about the distinction we have made between structure, satisfaction, and climate. The Figure has two major dependent dimensions, labelled micro/macro or level of abstraction and descriptive/evaluative or level of evaluation. The third dimension, level of analysis, will be discussed later; it leads to further differentiations between climate and satisfaction.

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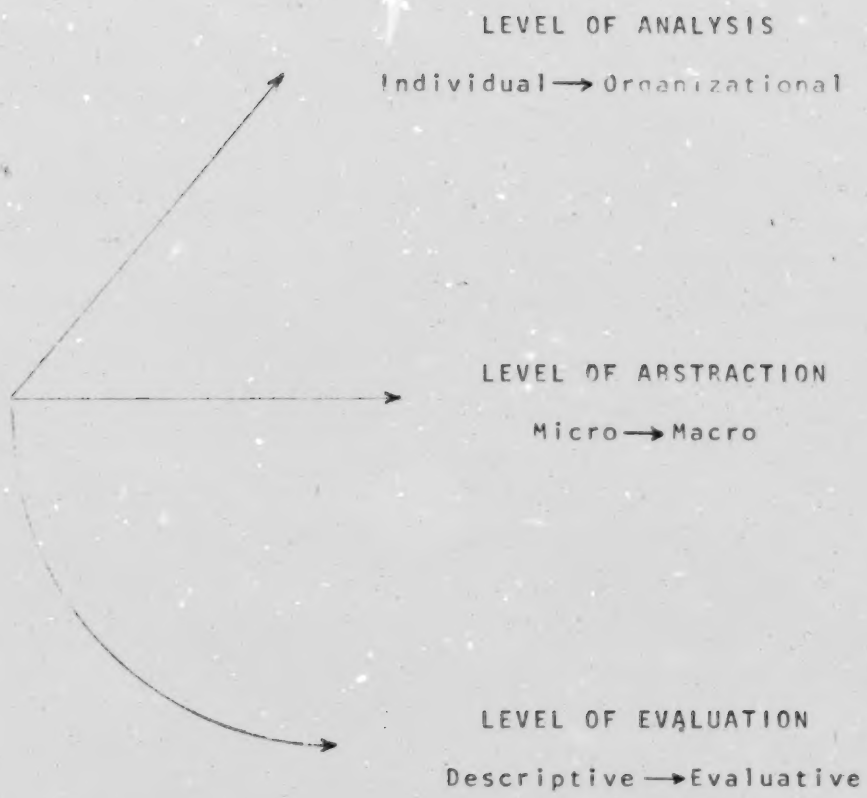

Figure 1. A working framework for conceptualizing job satisfaction and organizational climate perceptions.

Micro aspects of the organization are those that are clearly defined and perceivable in a relatively direct way, i.e., these characteristics of organizations are perceived directly as cues and require little abstracting or inferring or summarizing of information. Macro perceptions require all of the above - they require abstractions about, or summaries of, micro perceptions and inferences about missing information. These are climate perceptions. Because the more macro a perception becomes the more the characteristics of the person doing the perceiving enters into these perceptions, the arrow on the level of evaluation dimension does not proceed straight down the page but angles over to emphasize the impact of the person's way of abstracting information about the environment. Obviously it is possible for some climate perceptions to be quite far over to the evaluative side; examples are a "friendly" climate, or a "confusing" climate. However the specific elements of "friendly" and "confusing" may be defined with reference to behaviors occurring outside the individual.

Satisfaction is the evaluation, in personal terms, of the conditions existing in the organization. These are the satisfied/not satisfied, good/bad, just/unjust kinds of reactions to (as compared to abstractions of) conditions, events and even climate perceptions. Thus, two professors both might agree that their departments have a "climate for teaching" and agree on the kinds of cues they use to support such a perception, and disagree over whether they think that is good or bad, or makes them satisfied or dissatisfied. Given Figure 1 as a working framework, some of the implications of the figure will be examined in the published literature.

1. Operationalization of the Concepts. Both job satisfaction and climate have been most extensively researched by using questionnaires. However, there has been a great deal of inconsistency in the kinds of items used in these measures. Some job satisfaction measures contain only statements of conditions, i.e., items of different levels of inclusiveness but which have a relatively objective frame of reference; satisfaction of people is inferred from the conditions people report exist (Schneider & Alderfer, 1973). Most other measures of satisfaction inadvertently mix descriptions and evaluations. The JDI (Job Descriptive Index) measure of satisfaction (Smith, Kendall & Hulin, 1969) is one in which a conscious mixing of descriptive and evaluative items was accomplished; it is intriguing to note that this measure of job satisfaction is called the Job Descriptive Index.

Payne (1973), however, has taken the Work Itself scale from the JDI and sorted the items into clearly evaluative items (satisfying, better than other jobs I've had, worthwhile, boring, wrong sort of job for me) and clearly descriptive items (needs a lot of skill, same day after day, needs a lot of experience, takes it out of you, simple, routine) and shown that: (1) the evaluative items correlate well with each other (mean inter-item r = .50) while the descriptive items do not (mean inter-item r = .12); and (2) when correlated with Hoppock's (1935) global measure of job satisfaction the average evaluative item correlated .56 while the average descriptive item correlated .13. Indeed, Smith, Smith and Rollo (1974) have recently factor analyzed the JDI and found two Work scales - a descriptive one and an evaluative one.

Johannesson (1973) on the other hand has examined evidence supporting the idea that climate is a redundancy; that, as Guion (1973b) has put it, climate is a reinvention of the satisfaction wheel. Johannesson (1973), through a series of cluster analyses of "climate" and "satisfaction" items and measures found five clusters; Three of the five clusters showed some overlap in "satisfaction" and "climate" items and this was the basis for his conclusions that the two constructs were the same! Payne (1973) and Hellriegel and Slocum (1974) do not agree and neither does the present author. In addition to the generally weak overlap between climate and satisfaction (Payne, 1973) Johannesson (1973) also used an inappropriate unit of analysis. This issue will be discussed in Number 2, Unit of Analysis.

One more example of confounding the evaluative with the descriptive will be presented. Porter (1961) developed the idea that assessment of need satisfaction among managers was relatively unresearched. He adapted the theory of Maslow (1954) and the writings of McGregor (1960) to the development of a measure of need satisfaction. Porter conceptualized satisfaction as the discrepancy between what people perceive exists in their environment and what they think should exist. A series of 13 items were prepared to which each respondent indicated "how much of the characteristic there is now" and "how much should there be". While this procedure has been used in hundreds of studies, (Lawler, 1973) a close examination indicates that some of the items fail to assess conditions on the job. For example: "How much of a feeling of security exists in your job?" or "How much is a feeling of accomplishment characteristic of your job?" Surely jobs do not feel.

Climate measures have not been clearer in their descriptive vs. evaluative frames of reference. Schneider (1973a; Schneider & Hall, 1972) has asked for personal evaluations in two of his climate measures but he has at least been clear about his units of analysis (Schneider, 1973a). At the other extreme, in an attempt to divorce the person from the climate some measures of "climate" have not included the perceptions of people (Astin & Holland, 1961; Evan, 1963); these measures simply count micro, objective, characteristics. Payne (1973) has also advocated this solution to climate research and in their early review of the literature Forehand and Gilmer (1964) somewhat confused where on the micro/macro, descriptive/evaluative continua climate lies. Many micro perceptions are appropriately classified as structure, not climate; this issue will be addressed again in Part II of this paper. The important point is, that following Figure 1 a more careful distinction must be made between satisfaction and climate items before we can understand some of their empirically determined similarities and differences.

Satisfaction should refer to evaluations of micro and macro events and conditions; the more the conditions fulfill some system of needs or values the individual holds, the more satisfied he or she is. Climate most appropriately refers to the macro perceptions people have and these macro perceptions are based on practices and procedures, conditions and events in the organization. But one should not speak of these conditions and events adding up to climate; different patterns of conditions and events result in the perception of different climates and with reference to each such climate one may speak of amount.

2. Level of Analysis. Questionnaire items have been one major problem in climate research. Another problem has been the "unit of analysis problem". This refers to: (1) the development of climate measures on individuals or organizations; and (2) the analysis of climate data at the individual or organizational level. A more pointed way of posing the question is: Should climate measures be used to identify individual or organizational differences? This question refers to the level of analysis line in Figure 1. If climate is conceptualized as the property of an organization then the individual is not the appropriate unit of analysis. Conversely, if one wishes to use individual perceptions of climate for some reason - to predict individual turnover or other individual behavior (Schneider, 1973a) - it should be understood that climate perceptions and satisfaction, both being based on the same work conditions, must be correlated. We should not be surprised at this correlation, but we should also not infer that the satisfaction is based only on organizational conditions. To be blunt, people's perceptions of the conditions an organization creates for them will reflect what the organization is and what the individual is. All of the problems associated with the reliability of the person as a measuring instrument from selective perception to adaptation level enter also into perceptions of organizational conditions. While the problem can be somewhat alleviated by writing descriptive questionnaire items, the working framework presented in Figure 1 shows that an individual's macro perceptions will be at least somewhat subjective.

Does this mean individual perceptions of organizations should no longer be used in research? Of course not. What it does mean is that if one wishes

to differentiate one organization from another, or to describe one organization, then the appropriate procedure is different from the traditional method for describing individuals; traditional methods reflect individual, not organizational differences.

If one desires to describe the climate of one organization the items in a questionnaire that describe that organization are those items on which people agree; in a satisfaction measure the procedure is to select items on which people disagree because only with variance in responses can correlations be obtained. A climate measure, in addition to containing descriptive micro and macro items, should show low within-organization variability but high between-organization variance (some expected sources of within-organization variance in climate measures are discussed below). The question of between-organization variance has not been of particular interest to job satisfaction researchers but has been the focus of climate research (c.f. Litwin & Stringer, 1968; Payne, Pheysey & Pugh, 1970; Schneider, 1974; Schneider & Bartlett, 1968, 1970). Indeed careful study of the early climate literature (c.f., Argyris, 1957b; Fleishman, 1953; Lewin, Lippitt & White, 1935) shows that when one organization was the focus of interest the "climate" was the common or shared perception of organizational members or observers.

More recently, however, some researchers have used the differences between individuals in their perceptions of climate in one or a few organizations and then generalized to the effects of organizational climate on such outcome variables as job satisfaction and/or performance. Johannesson (1973) is guilty of this confounding of measures of individuals and measures of organizations,

as are Pritchard and Karrasick (1973). The latter authors obtained the climate perceptions of individuals and correlated these perceptions with the job satisfaction and performance ratings of those same people. In concluding their paper, Pritchard and Karrasick then spoke of the effects of organizational climate on satisfaction and performance. George and Bishop (1971) and Friedlander and Greenberg (1971) have similarly confounded individual and organizational units of analysis.

In an attempt to remove some of the ambiquity surrounding the relationship between climate and satisfaction Schneider and Snyder (1974) have recently analyzed some data at both the individual and organizational levels of analysis. Using a measure of climate which met the descriptive and between-organization-differences criteria outlined above, Schneider and Snyder (1974) hypothesized that (1) people in an organization will agree more on the climate than they would on their personal satisfaction and (2) measures of personal satisfaction will correlate more strongly with each other than they would with a measure of climate.

The satisfaction measures they used were the JDI (Smith, Kendall & Hulin, 1969) and a measure of Alderfer's (1972) theory of need satisfaction in organizations (see Schneider & Alderfer, 1973). The climate measure used was developed by Schneider and Bartlett (1968) on a sample of life insurance agency managers from 143 different agencies. Factor analysis was used to isolate the six dimensions eventually used for research purposes. Since the data were from 143 different agencies, (there is only one manager in an agency) the measure should

reflect organizational differences more than the typical climate measure which is developed in one or at best a few organizations.

Schneider and Snyder (1974) found at the individual level of analysis (N = 522) that (1) satisfaction correlated more with satisfaction than with climate; (2) the six climate dimensions correlated more highly with each other than they correlated with satisfaction while the between satisfaction measure correlations were higher than the within satisfaction measure correlations. At the organizational level of analysis (N = 50 life insurance agencies) there were three times as many significant between-position correlations on climate than there were for satisfaction. Additional analysis of their data showed that for some positions in the agencies climate and satisfaction were correlated (.40 - .60) while for other positions the correlations were essentially zero. Further, they found that satisfaction predicted turnover much more effectively than climate did. Although not conclusive evidence and not having gone through all of the careful steps in the development of measures suggested by Guion (1973b), these data indicate at least one reason why we should not throw out the climate concept - climate perceptions behave differently from satisfaction. In Part II additional reasons for retaining the concept will be presented, reasons which support a conclusion reached by Taguiri (1968):

> "It is clear that the term [climate] is used in widely disparate contexts. Yet each time it refers to some feature or characteristic of the environment that has consequences for the behavior of an individual or group, and to which the person is somehow sensitive...

> When everything else is held constant but climate, behavior differs. The term appears to meet the need for a synthetic, molar concept of the environment" (Taguiri, 1968, p. 18)

Summary

Part I has tried to make some logical and conceptual distinctions between job satisfaction and organizational climate. It was argued that confusion over three problems has lead some authors to suggest that perhaps climate is a redundancy. First it was noted that the word satisfaction implies an affective internal state while the word climate refers to a molar description of a situation. Second, the point was made that these molar descriptions are composed of events and conditions people in an organization perceive; that climate perceptions are abstractions of events and conditions existing in an organization. Third, literature was reviewed suggesting that the basic satisfaction research orientation, coming from early attitude theory research, has been affectively and individually oriented while climate research has been more descriptively and organizationally oriented. Research confounding the affective/descriptive and individual/organizational issues was cited. Finally, research was reported which suggests that when climate and satisfaction measures are concurrently researched, the two kinds of measures behave quite differently.

Part II: Climates As Concepts

In Part I of this paper the concern was in explaining some ways in which climate was different from job satisfaction and organizational structure. Showing how a construct differs from others is only one step towards accepting it as an entity; one must also define the kinds of predictions possible with the construct. In so doing one should be able to draw on earlier conceptions of the causes of human behavior and show the relationship of the newer idea to those which have served the science for longer periods of time.

One purpose of Part II is to propose a formal definition of climate that includes the functions climate perceptions serve in helping people adapt to the situations in which they find themselves. The second purpose is to take the proposed definition and examine it in the context of how three different schools of psychology might conceptualize and research the climate concept. The three schools chosen as frames of reference were Structuralism, Functionalism and Gestalt.

A Definition of Climate

In defining climate I do not propose to do a formal review of the literature on organizational climate for this has been more than adequately accomplished by a number of authors: Hellriegel and Slocum (1974) provide an exhaustive review of climate research directed at examining the level of the measures employed in such research and how climate is conceptualized; Campbell,

Dunnette, Lawler & Weick (1970) provide a review of literature primarily with reference to managerial behavior; Forehand and Gilmer (1964) wrote an early review of the topic including climate variables and structure both under the heading of "environmental variation;" in a similarly broad-based review Moos (1973), reflecting the increased interest in ecological psychology, provides information on research in settings as disparate as schools, psychiatric wards and industry; and, Taguiri's (1968) paper in the Taguiri and Litwin (1968) volume of papers on climate presents a number of arguments for and against retaining the climate concept. The present author, like Taguiri (1968) argues for retaining the concept, but in order to retain a concept one must have it defined and show how the definition accounts for existing literature and the kinds of hypotheses the definition suggests for research.

This author's abstraction of the literature leads to the conclusion that the theme common to most research calling itself climate research is the idea of concept formation.[4] The concepts people are forming are of "the organization I work for." Epstein (1973) has used a similar idea in attempting to organize the idea of self-esteem; he refers to his conceptualization as a "theory of self." Thus, one might call climate perceptions, "theories of organization."

Organizations, like people, behave. They behave toward various aspects of their internal and external environments and they behave differently depending upon the nature of the routine and non-routine problems that confront them. The concepts people form of their organization are based on abstractions of their perceptions of the ways their organizations behave. Thus,

people may have a conception of their organization with regard to pay policies ("reward orientation"), supervisory style ("consideration - initiating structure"), obsolescence, turnover, leadership, or any one of a thousand different potential foci for concept formation. People, just as they conceptualize themselves along many dimensions [husband or wife, father or mother, Church or Country Club member, and so forth; see Hall (1971)] conceptualize their organization along a number of dimensions. [At least researchers think employees conceptualize organizations on many different dimensions: Campbell's (see Pritchard & Karrasick, 1973) measure has 22 dimensions and House and Rizzo's (1972) recent climate measure has 19 dimensions.]

People have concepts (concept in plural) because it is undeniably true that different themes guide different kinds of behaviors in the same organization. It seems that each organization has more than one climate because as noted in Part I to ask the question: "how much climate does your organization have?" is meaningless. What we must be interested in is the degree to which a given organization has established each of a number of integrated behavioral patterns; we must ask what kind of climate exists for motivation, or leadership, or turnover, for creativity or for accidents. Thus we ask "how much of a climate for _____?" exists in an organization. (As noted in Part I, one may ask: "how satisfied are you?" and have it be a meaningful question.)

A review of the literature reveals that many climate researchers have indeed assessed the specific climate they were interested in rather than attempting to develop some omnibus measure. For example Fleishman's (1953) work on leadership climate was an attempt to specifically isolate the manage-

ment practices and conditions when those undergoing human relations training failed to implement what they learned; thus a climate for leadership. Litwin and Stringer's (1968) provocative research examined the psychological conditions under which such motives as nAch, nAff and nPow would be most likely to become manifest; a climate for motivation. Schneider's (1974; Schneider & Bartlett, 1968, 1970) research in life insurance agencies has explored climates for new employees, and Taylor (1972) examined climates for creativity.

The point is that these researchers were interested in understanding the pattern of formal and informal practices, conditions, events and experiences which characterized an organization and resulted in some previously determined criterion behavior. All of the researchers could have gone into the same set of organizations because each of those climates may exist, to some extent, in every organization.

If we combine the ideas presented in Part I with the further concept that any organization has many climates, the following definition of organizational climate may be proposed:

> An organization's climates are the concepts people share about the organization. As concepts, climate perceptions are meaningful abstractions of sets of cues, the cues being the many specific events, conditions, practices and procedures that occur in the daily life of an organization. As concepts, climate perceptions help individuals reduce information overload and function as frameworks against which people identify behaviors that will adapt them to their situation.

This definition has two major components: (1) perception and (2) adaptation. The hypothesis is that perceptions, when they are shared, are an organizational property as real for those who share the perception as any "harder" feature of the organization. Further, the definition suggests that the conceptions are based on lower order abstractions - procedures, events conditions and practices - and that they are meaningful. The adaptation component of the definition indicates that people form concepts about the organization for reasons; to reduce information overload and perhaps more importantly, so that they can identify the kinds of behaviors necessary on their part to adapt to the situation.

Three schools of psychology have been concerned with ideas like these - Structuralism and Gestalt were primarily interested in perceptions and Functionalism in adaptation. In the remainder of Part II of the paper, each of these schools of psychology will be examined for comments they may have to offer on the concept of climate that has been proposed. It will be of interest to note the research ideas and hypotheses that can be deduced from such an examination. In addition, research in climate relevant to such research ideas and hypotheses will be cited.

Structuralism

The Structuralist school of psychology had as its major goal the analysis of experiences into their psychological elements. The aims of this school were understanding elements and their attributes, their modes of

composition and the comprehension of the structural characteristics of familiar experiences (Murphy, 1950). If the ideas of Structuralism were adapted to studies in organizational climate, such an approach would lead to specifying the elements (what we called "the many specific events, conditions, practices and procedures") underlying the macro concepts people seem to propose as summary descriptions of the way their employing organizations transact business with their internal and external environment. Thus the way organizations reward people, and the concept people in an organization have about the reward system, constitute practices and procedures which may include (1) amount of reward, (2) equity of reward, (3) frequency of reward, (4) relationships between effort and reward, (5) kinds of rewards, and so forth. Along what dimensions do people think about organizational rewards may be like asking along what dimensions do people conceptualize sound or color?

Are their psychologically meaningful dimensions of reward systems that are equivalent to timbre or pitch and hue or brightness? Similar thoughts about the psychological dimensions underlying the events, conditions, practices and procedures regarding supervision or of obsolescence or personnel development in an organization come to mind. In addition "across modality" use of cues could be researched. That is, Structuralists would encourage research on questions similar to problems regarding the relationship between the psychology of taste and smell: When an organization's practices regarding X (say rewards) are one thing (say equity) does this tell employees something about the organization with regard to Y (say supervision)? That is, can a cue in the environ-

ment serve as component of more than one climate perception? In order to research this question we should have to avoid the tendency to achieve simple structure and/or rotate factors to orthogonality in analyzing the psychological structure of our climate measures.

Structuralists as Psychologists. The important point is that Structuralists, as psychologists would emphasize underlying psychological dimension(s). In the study of vision and hearing, for example, Structuralists developed a methodology (the psycho-physical techniques) for establishing a psychology of the senses; they did not depend on the physical attributes of sound and light as a basis for understanding the psychological ramifications of these physical phenomena.

Some researchers and commentators on organizational climate have indicated that the ultimate procedure to be employed in climate research is the assessment of the organization's structural conditions. For example, Johanneson (1973) whose research was reviewed above, reached this conclusion and so has Payne (1973). Astin and Holland (1961) and Evan (1963) in the educational setting have already interpreted structural assessments as climate.

It seems to this writer that such an approach would deny a basic perceptual basis to behavior. By denying a perceptual basis to behavior, one also denies a motivational basis to behavior (Ryan, 1970). Thus all of the major theories of motivation in organizational settings have at their basis the perception of cues from the environment as "triggers" for arousal and as triggers for the direction of behavior.

The perceptual bases of equity theory (Adams, 1963, 1965) and Valence-Instrumentality-Expectancy (VIE) theory (Miner & Dachler, 1973) are very clear; Achievement motivation is said to predict behavior best when people perceive a 50-50 chance of success (Atkinson & Feather 1966); both Argyris (1957a) and McGregor (1960) stress perceptions - McGregor (1967) speaks of the pivotal importance to an organization of managers' perceptions of man ("managerial cosmology") and Argyris (1957a) conceptualizes worker apathy to be a response to perceptions that the world of work rewards infantile behavior, childish dependence, and so forth.

Until such time as it is clear that structural properties of organizations are equivalent to the psychological meaning of organizations for people, if we are to understand why people behave as they do people's perceptions of their work world will be important. Those organization researchers who deny the importance of perception as a basis for behavior, who would emphasize organizational structure, should not be confused with the Structuralist school of psychology.

Methodology. The structuralist school of psychology emphasized both the psycho-physical methods and introspection. Unfortunately the various psychophysical procedures utilized in aiding the understanding of the psychology of the fundamental senses have not been extended to understanding the psychology of organizations. There is little research known to the author which treats organizations as stimuli, manipulating known characteristics of those organizations and, through analysis, deriving basic psychological dimensions. A

beginning in this direction, however, has been made by Hulin (1973) and his students who have used multidimensional scaling procedures for isolating underlying psychological dimensions of organizations. Also, the work of Dieterly and Schneider (1974) may fit this structuralist concept. They manipulated (in a simulated work setting) position level, amount of participation in decision-making and customer/stockholder orientation of an organization and examined main effects and interactions on climate perceptions. There were some interesting interaction effects; these are discussed below. The fact is that, as Schneider and Hall (1972) noted, there has been very little research on the antecedents of climate perceptions. In our definition, of course, the antecedent conditions are of paramount importance since it is these that must be changed before climate perceptions can be expected to change.

From an introspective point of view. An example of a structuralist approach to studying organizational climate is provided by Argyris (1957b). Argyris viewed behavior in organizations as the "...buzzing confusion of simultaneously existing, multilevel, mutually interacting variables" (1957b, p. 501). The chore of the researcher, he said, was to isolate the important elements in this buzzing confusion and then see how those elements structured themselves into meaningful (psychologically meaningful) concepts. In his study of a bank, Argyris (1957b) isolated 13 elements which he felt represented the essence of the bank's behavior with regard to it's human component. These elements included the hiring process, the promotion process, management style, work standards, the personality of members, morale of employees, etc.

He then assumed that these elements could somehow be described in more gross categories: (1) formal organizational variables, (2) personality variables, (3) informal organizational variables (a result of the interaction of 1 and 2). These, then, are the three supra-elements of an organization's climate. The understanding of the components of each of these supra elements permits specification of change and specification of the consequences of change (see Argyris, 1957b for this argument). The important point is that size, hierarchical levels, technology, etc. could not yield this sense of an organization's climate.

Although Argyris might disagree, one does not have to conduct a personal analysis of each organization in order to operationalize a structuralist approach to understanding an organization's climate. Multidimensional questionnaire measures of climate all take an implicitly structuralist point of view; the concept of scale internal consistency for each dimension demands that the concept being described be broken down into its related but separable components. An examination of measures developed by Schneider & Hall (1972) reveals this strategy very well since the four dimensions of climate they isolated were based on a theory that specified the practices and procedures one would find in a climate promoting psychological success. Likert's (1967) approach to describing the systems of an organization's behavior also takes an a priori theoretical stand. Even when a theory or other explicit statement of the practices and procedures organizations use to create particular kinds

of climates is not available, the items in questionnaire measures are invariably collections of the behavior one suspects typify the practices and procedures of a system (c.f., Litwin & Stringer, 1968; Schneider & Bartlett, 1970).

Conclusion. Structuralists would decry the dependence on "hard" variables as a means of understanding the psychology of organizations. They would also be unhappy about our failure to utilize introspective reports and the psycho-physical (i.e., psycho-structural) methods (see Guilford, 1954) for establishing the major psychological dimensions of organizations. I should think they would be somewhat happier about the elemental approach represented by many of the questionnaire measures.

Gestalt Psychology

Structured Wholes. The concern here is with the idea that climate perceptions are meaningful abstractions. The major contribution of Gestalt psychology was its emphasis on the organization of perceptions; the whole being something special and not definable by a simple examination or sum of the parts. While this emphasis was most clearly felt in the study of perception, it was represented also in learning theory, educational psychology, social psychology, (see Chaplin & Krawiec, 1968) and, through Lewin's students, in the study of organizational behavior (c.f. Marrow, 1970).

Two major principles of Gestalt psychology were that the task of the perceiver is: (1) to apprehend the order which objectively exists in the

world and (2) to create new order by a process of integration through thought (Murphy, 1950). The assumption was that nature has order and the perceiver's chore is to discover that order. One method for doing this is to create order, always based on perceptions of the objective world.

This suggests that a set of empirically related items in a questionnaire represents the apprehension of order but not the higher order abstraction which Gestalt theory proposes is the ultimate goal of perceptions of the world. The meaningfulness of a cluster of perceptions is not known on the basis of empirically determined relationships among parts but by the creation of a totality with its own wholeness (Allport, 1955).

There is a very important implication of this principle of creating a totality: Given some limited amount of information in which people apprehend order, they may create a totality [what Ryan (1970) calls a cumulative perception], which represents more than the simple sum of the limited information actually perceived. The implications of the actually perceived information thus extend to information not perceived but of the same psychological meaningfulness as the perceived information. Given perceptions of elements with some perceived relationship, a whole or total concept is formed once there exists sufficient information to perceive order. No one would claim that the "right" order was perceived; the fact is that the theory indicates perceived order results in the creation of a totality which covers all aspects of the total, perceived or not; in Floyd Allport's (1955) terminology meaningfulness is apprehended.

Cofer (1973) has reported how this principle operates in the memory of stories. Stories are made up of parts, and each part has a separate meaning. Given enough of the parts, people ascertain some order and then create a story; the story has meaning. Cofer notes that the resultant story not only has a theme but that people report they were told particular parts of stories (that they never heard) but which "make sense" given the parts that were presented. Cofer (1973) notes there is evidence to suggest this memory schema or theme principle applies to other than auditory senses and that the creation of "missing" information is not, as Bartlett (1932) hypothesized, particularly tied to emotional responses.

Attitudes. The Gestalt principles and the concept of emotional responses return us necessarily to the concept of attitudes. By defining climates as conceptions people have of their organizations we come quite close to the definitions social psychologists of the Gestalt tradition have proposed for attitudes. Thus, Lewin (1935) and Heider (1958), both clearly from the Gestalt tradition, conceptualized attitudes as summary cognitive evaluations of a person's worlds. The difference between climate and satisfaction is the word evaluations. Indeed among social psychologists associated with attitudes, these two scholars from the Gestalt tradition placed less emphasis on the evaluative component of attitudes, more emphasis on the cognitive organization component of attitude, and more emphasis on behavior than other researchers did. Lewin's major theme was locomotion, or behavior within the life space.[5] Heider's view of man seeking cognitive consistency is based on behavior; frequent interpersonal inter-

action, high degree of familiarity, ownership, similarity of beliefs, etc. (see Ostrom, 1968).

The point is that while the idea of concepts is not foreign to attitude theory, when Gestalt-like ideas have been used it has been predominantly by those less frequently associated with the evaluative component in attitude research.

Implications. The implications of Gestalt principles for climate research are many. First, measures of climate may yield positive responses to questions about the existence of a particular practice or procedure when that particular practice or procedure does not exist in the organization. One might hypothesize that this represents an error in perception; an alternative hypothesis is that this represents a process of creating meaningfulness. That is, the response is real and valid in that it represents the theme or total perception rather than the specific practice or procedure. This indicates another reason not to put a great deal of faith in the response to individual questions in an interview or questionnaire; the first reason is reliability, this reason is validity regarding the particular rather than the general case.

Dieterly and Schneider (1974) provide some data on the tendency for a theme to promote positive responses to questions about practices and procedures when those practices could only be inferred. In a laboratory setting (simulated work setting) subjects were given three pieces of information: (1) Their position in a hierarchy, (2) whether or not they would be permitted to participate in decisions affecting them, and (3) if the company was trying to provide good service to customers or increase the return of investment to stockholders. A four-

dimension climate measure derived from the Campbell, et. al. (1970) review was used as a dependent variable (perceptions of power were also used). Every climate dimension was either significantly accounted for by a main effect and/or a two-way interaction. Apparently the experimental treatments created a theme which led not only to perceptions of the climate of the situation but led to perceptions on which subjects agreed.

Thus if subjects in the different experimental treatments had not had similar perceptions of the climate of the situation then no main effect or interaction effects would have been found. Litwin and Stringer's (1968) laboratory studies also reveal this tendency of subjects to perceive the climate of a situation similarly; this research will be described in greater detail below. Suffice it to say at this point that the Dieterly and Schneider (1974) and Litwin and Stringer (1968) research both suggest that particular conditions in an organization seem to be combined in the perceptions of members such that people in the "same" situation do see it similarly.

Dieterly and Schneider's data suggest a second implication following from Gestalt theory: Gestalt theory, and in particular social psychologists from the Gestalt tradition, stress not only the drive to create order but the relationship between perceptions and behavior. Thus Ostrom (1968, p. 12) notes that "Attitudes, for Lewin, were represented in the individual's life space and imbedded in a cognitive context, with affective and cognitive structure operating in an interdependent fashion to determine subsequent behavior". By extending the previous discussion of creating a meaningful totality to behavior, it

follows logically that if people create perceptions of totalities consisting of practices and procedures that "fit" but do not actually exist, when it comes to a situation that demands behavior, the same principle of creation or "filling in the theme" should apply; to wit, behave in a way that "fits".

A report of one of the first attempts to create social climates and examine their effects (Lewin, Lippit & White, 1939) reveals how a theme leads to the creation of consistent, although not previously specified, behaviors. In this study three social climates, authoritarian, democratic and laissez-foire were created. Leaders (of boy's groups) were trained to behave in these styles. Yet

> "The adult who was faced with the constantly changing problems of leading a group of children found himself doing things which he could never have anticipated he would do. And the unanticipated things which the leader with the predetermined autocratic philosophy did were quite different from the things he did in the same situations when he changed to the democratic role." (White & Lippitt, 1968, p. 319).

Indeed individual leaders not only created styles of behavior that were consistent with their roles, but different leaders when they played the same roles tended to behave similarly. A climate once created then, can result in the creation of new behaviors by individuals that fit the climate.

Litwin and Stringer (1968) have noted some similarities and differences between this hypothesis regarding fitting behavior to the situation and the role-set or role expectation theories of behavior in organizations (c.f., Kahn, Wolfe, Quinn, Shoek & Rosenthal, 1964). Both are hypotheses about the effects

of situation on behavior and both assume that the effects on behavior are general, i.e., not specific to certain subsets of individuals.[6] The differences Litwin and Stringer (1968) mention between role-set and climate may be summarized as follows:

1. role-set theory as compared to climate assumes that behavior is affected only by immediate contact between persons.

2. Role-sets are more likely to be actively communicated to people; climate perceptions arise from more informal perceptions.

3. Role-sets are assumed to have stability while climate conditions are seen as less stable.[7]

4. Role-set theory is more molecular while climate is more molar.

5. Changes in role-set expectations can be achieved by taking into account a fewer number of variables.

There is some evidence for the effects of climate being different from the effects of role-set expectations. This is provided by research conducted by Frederiksen, Jensen and Beaton (1972). Frederiksen, et al. created climates by experimentally manipulating the Administrative Procedures (to be Innovative or to follow Rules) and the Supervisory Style (Global vs. Detailed) under which people worked. They further defined a Consistent Climate (Innovative/Global or Rules/Detailed) and Inconsistent Climate (Innovative/Detailed or Rules/Global). In consistent climates production [on the In-Basket Test (Frederiksen, 1962)], was higher than in the inconsistent climate; especially in the Innovative/ Detailed inconsistent climate productivity was significantly depressed. It

would seem that role-set theory would have a difficult time explaining these data. It would be particularly difficult to explain the fact that Frederiksen, et al. found that relationships between the dimensions of performance on the In-Basket vary as a function of the climate under which people work. Thus not only were effects on level of performance found, but patterns of performance were also shown to be attributable to the climate under which people worked (see Frederiksen, et al., 1972, especially pp. 241-265).

Summary. Gestalt psychologists would be pleased with the research on climate. This research suggests that people create meaningfulness based on pieces of information they perceive in their environment, that they share these perceptions and that they behave in ways that "fit" the theme they perceive.

Functionalism

As a "school", Functionalism was the early American school of psychology for those who were not strict Titchnerians (Structuralists). Thus it included physiological psychologists (Münsterberg), social psychologists (McDougall), educational psychologists (Dewey) and psychologists concerned with the study of individual differences (Cattell). If there was a difference between Functionalism and Structuralism it concerned the analysis of the functions or process of behavior and how behavior served to help the organism's adjustment to environments (Boring, 1950; Murphy, 1950). This emphasis clearly came from Darwin's statements about evolution and survival through adaptation and the subsequent developments in psychometric procedures by Galton and Spearman for expressing

relationships between measures of individual differences (Boring, 1950). There were really two emphases in Functionlism: (1) The functions of cognition and behavior in adaptation to the environment and (2) the role of individual differences in the capacity to adapt. Functionalism, then, offers an answer to the "why?" of perceptions: to adapt. In considering this question of adaptation, however, there were two forms the hypothesis took - adaptation as a generalized phenomenon and individual differences in adaptation. If perceptions lead to a generalized adaptation then people must be seen as sharing perceptions.

The Sharing of Perceptions. It is often supposed that Darwin's major impact on psychology was through Galton with the emphasis on individual differences. Of equal importance, however, was Darwin's impact on social psychology through McDougall.

A central element in McDougall's (1908) theory was perception. He hypothesized that instinct caused organisms to perceive situations in certain ways and that perception lead to emotion. While one need not accept instinct as an explanatory variable, his emphasis on the situation preceding the emotional or affective response paralliels the idea presented earlier in this paper that perception is not the same as the emotional response and that people have affective responses to conditions. Another important aspect of McDougall's thinking was his way of conceptualizing self-esteem (what he called the "self-regarding sentiment"). On the basis of this sentiment, he argued, people made their decisions about membership in social groups, a concept to be elaborated on fifty years later by Festinger (1954).

It was the social psychologists who came after McDougall (really cultural anthropologists) who showed fully the impact of the situation (rather than the impact of instinct) on man's cognitions of his external world. In part, these scientists proved McDougall correct - man does have characteristic ways of perceiving his environment and these perceptions serve to help man behave in a way that adapts him to the exigencies of his environment. The source of the ways of perceiving was the culture or situation, rather than instinct (c.f. Mead, 1928). Shortly after these studies came the work of Lewin, Sherif, etc.

Sherif (1936) was especially concerned with the influence of the group on perceptions. He showed how people adapted their perceptions to fit the norm, not only of a culture but of a small group. Sherif's findings suggested that if one understood how the situation (family, religion, politics) was perceived, one was well on the way to understanding behavior.

A number of researchers have employed the cultural model in conceptualizing organizational climate. For example, Sells (1968, p. 87) writes that:

> "...organizational climate appears to be a function of the cultural patterns of organizations and to include those generalized orientations of members which are (a) shared by a majority of members in an organizational unit and (b) acquired in relation to factors specific to the organizational situation"

There is considerable research evidence existing to support the tendency for people in the same situation to share their perceptions. Already discussed were studies by Dieterly and Schneider (1974), Litwin and Stringer (1968), and Schneider and Snyder (1974). Even studies that employ climate measured developed

on the individual (rather than organizational) differences model are found to reveal differences between organizations or situations hypothesized to be different on the basis of some external judgment. Pritchard and Karrasick (1973) for example were able to "validate" their measure by showing that pooling responses within an organization yielded a climate profile consistent with expert judgments about the conditions existing in the organization. In a similar fashion Schneider and Hall (1972), studying the work climate of priests in different work settings, supported hypothesized differences between Roman Catholic pastors, assistant pastors and priest-specialists with a climate measure they developed. All of these studies suggest that people in the same work setting can and do agree on their perceptions of their situation.

Adaptation. One may interpret Sells' point (b) as representing adaptation to the organizational situation, i.e., orientations which fit the organizational situation. Regarding the adaptation hypothesis, one could resort to the cognitive path-goal or valence theories (earlier called VIE) of behavior for an explanation (c.f. Dachler & Mobley, 1973; Lawler, 1973; Mitchell & Biglan, 1971; Porter & Lawler, 1968; Vroom, 1964). These theories suggest that man's perceptions are adaptive in that he behaves in congruence with his perceptions of: (1) whether differences in his behavior lead to differences in reward size, (2) whether the rewards he receives are desired rewards, and (3) whether he is able to perform at levels which may result in the behavior perceived to yield the desired rewards.

With its emphasis on perceptions concerning obtaining specific rewards, this framework is highly functional for those rewards, but not particularly useful for specifying the whole realm of behaviors which constitute adaptation to a particular situation. Thus acquiring rewards probably does not determine perceptions of the situation; acquiring rewards is one element in the situation (Ryan, 1970). McClelland (1972), although speaking about learning in general puts the role of rewards as follows:

> "Think of what goes on in a man's mind as if it were a computer printout of a lot of miscellaneous material. In common sense terms, a number of thoughts buzz through a man's head at any given period of time.... In real life, rewards or incentives are like punctuation marks. They break up sequences [of events] or call attention to them. They are attention-getting, set-forming, effect-producing mechanisms (rather than substitutes for something else)." (McClelland, 1972, p. 526).

The "number of thoughts" buzzing through a man's head are his general perceptions. Rewards may help focus these perceptions by serving as figure against background but they (the rewards) are clearly not the only or even the primary determinant of behavior.

Katz and Kahn (1966) note that organizations cannot plan for all contingencies yet something in the organization results in "spontaneous" behavior which is cooperative rather than antagonistic, protective rather than destructive, constructive rather than damning, which leads people to try and improve their skills instead of sitting back and becoming obsolescent or to speak favorably rather than unfavorably to outsiders about the organization (see especially p. 338).

Only if rewards are conceptualized in their broadest sense, that is, as cues from the environment that suggest to an individual that appropriate adaptive behavior has been displayed (Katz & Kahn, 1966; Schneider & Olson, 1970) can the VIE theories begin to help us understand how climate is reflected in behavior. Such a broadening of VIE theory leads to an hypothesis about people in general: People have a fundamental need or desire for information about the status of their behavior vis a vis their environment. That is, people desire to adapt to, or be in harmony with, their environment. In order to achieve this goal they require information from their environment about the degree to which their behavior is effective in achieving the goal of effective adaptations. Thus, just as organizations adapt strategies of behaving that fit the dynamics of their environment (c.f. Duncan, 1972; Lawrence & Lorsh, 1969) it seems no less logical to suggest a similar hypothesis about people in work organizations (Argyris, 1957a). Ryan (1970) notes: "In recent years, there has been frequent discussion of incongruity, imbalance, incompleteness, or lack of cognitive clarity as instigators of perception, exploration and thinking (p. 547)." If we then postulate that individuals attempt to adapt to their environment, we must further hypothesize that they seek information about their environment and use the information they gather as a basis for their behavior. This act of seeking information, of forming concepts about the environment to be used as a framework for adaptive behavior are called intentional perceptions by Ryan (1970) and locationary perceptions by Dieterly and Schneider (1974).

Fleishman (1953), for example, reported results suggesting how foremen adapted their behavior to the prevailing climate in a factory by behaving not as they were taught in a human relations program but in a style that fit their work climate; i.e., the way their supervisor behaved. Frederiksen et al. (1972) found that people who took a more thoughtful approach to the In-Basket task and worked under either a climate for Innovation (compared to Rules) or a climate of Global (as compared to Detailed) supervision were more likely to interact with their peers (heads of other divisions) in solving problems. People in Rules or Detailed conditions who also took a thoughtful approach to problem solving worked through their superiors and through that part of the organization for which they were responsible.

In a simulated work setting, Litwin and Stringer (1968) created climates designed to produce high levels of power, affiliation and achievement motivation (authoritarian, democratic and achieving climates, respectively). In all cases people who worked in the groups produced written themes which described the situation in terms similar to the climate stressed in the setting. All themes were scored for n power, n Affiliation and n Achievement. Performance scores showed higher Achievement in the Achievement climate, better quality but lower innovation under a Power climate; under Affiliation, innovation was higher but the company lost money. Paranthetically, it can be noted that people in the Affiliation condition, which was democratically oriented, either wanted their goal changed to a lower number of products or

their climate changed to be more production-oriented because the democratic procedures they were required to use did not fit the dynamic environment in which they were forced to operate. These data are similar to the findings of Burns and Stalker (1961) in the field setting showing how organizations adapt to their larger environments, and to hypotheses proposed by Duncan (1972) and Lawrence and Lorsch (1969) about the information seeking and adapting capabilities of organizations.

Evidence thus seems to support the idea that people adapt to the climate of their situation. Additional findings may be cited: Newcomb's (1961) classic study showing how Bennington students' views of the world were affected by their surroundings, the study cited earlier by Lippit and White (1968), in which people fit their behavior to the climate, and Argyris' (1957b) bank study reflecting the tendency of employees to behave similarly. Perhaps the pervasiveness of climate as a determinant of behavior and the tendency for people to adapt to a particular climate has been revealed in the infamous Watergate hearings surrounding the climate of deception and intrigue created during the U.S. elections for President in 1972 (Schlesinger, 1973).[8]

If people do adapt to their environment and "know" the appropriate behaviors for adaptation through their perceptions, one can ask why do they adapt? A simple hypothesis, as noted above, is that they adapt to achieve some kind of homeostatic balance with their psychological (as well as physical) environment. If homeostasis is important and if people strive for homeostasis then one may hypothesize (1) that it would be very difficult for people to

resist going along with a climate they perceive and (2) changing climate perceptions and changing behavior should be very difficult tasks.

Obviously maintaining a homeostatic psychological balance has received considerable research attention based especially on the work of Festinger (1957; see Abelson, Aronson, McGuire, Newcomb, Rosenberg & Tannenbaum, 1968). The cognitive consistency frameworks refer to the drive towards balanced perceptions while the functionalist orientation presented here emphasizes that individuals need to form concepts about the organization so they can balance their behavior to their concepts of what the organization is.

Regarding the hypothesis of lack of resistance to going along with perceptions of climate we may cite the classic Asch (1948) studies and, again, the findings in industrial and social psychological studies indicating the tendency for individuals to behave consistently with the situation they are in (e.g., Frederiksen et al., 1972; Lippitt & White, 1968). So far as resistance to change is concerned, this is a continuing problem notwithstanding the early research efforts of Coch and French (1948). Recent studies (c.f., Beer, 1971; Greiner, Leitch & Barnes, 1968) continue to report problems in changing perceptions and behavior. However, once change <u>is</u> brought about, it too seems to persist (Seashore & Bowers, 1970). Similar durability of perception is common to other forms of perceptions (Ryan, 1970).[9]

It thus seems that the adaptive function of climate perceptions is theoretically meaningful, at least tangentially supported by climate research and consistent with hypotheses about changing climate perceptions. The

hypothesis that people need information is not supportable on the basis of any data but it seems clear that people use information about their organization as a source of knowledge about appropriate behavior.

Individual Differences. In addition to the concept of general adaptation Functionalism spawned the interest in the scientific study of the range and correlates of individual differences. From this interest, in little more than 20 years the United States had tests that were able to successfully screen the majority of World War I military personnel. Since shortly after World War I [say Hull's (1928) book on Aptitude Testing] few advances in validity coefficients for the prediction of performance have been noted (Dunnette, 1973; Guion, 1974).

If our hypothesis about adaptation through perceptions of appropriate behavior is correct, then we can propose that the situation rather than the individual may be the cause of behavior; that situational demands may overwhelm individual differences precisely because the range of individual differences in most work settings is relatively narrow (Guion, 1974; Holdsworth, 1971).

Thus the full range of mechanical aptitude is not represented in the tool and die makers of a particular company any more than the full range of intelligence is represented in law school. There is considerable life and self-selection in job and occupational choice, reducing the range of individual differences to be found in any one job or occupation (c.f., Holland, 1966; Osipow, 1968). Anything which further reduces the range, either in the measured individual attribute or the variance in behavior, serves (through restriction

of range) to depress validity coefficients. We can hypothesize, then, that organizations which create climates that encourage the full range of individual differences to be displayed will also be organizations in which validity coefficients for the prediction of performance will be higher. If this is true, and evidence to be cited suggests it is true, then, Lewin's B = f(P,E) must be modified to read B = f(P,E) when E encourages P to express individual differences. Further, the hypothesis suggests that one possibility for increased levels of effort under job enrichment (Herzberg, 1966), management by objectives (Carroll & Tosi, 1973) and climates which treat employees as individuals (c.f. McGregor, 1960) is not an increased level of motivation, per se, but an increase in the variance of behavior which results in increased overall levels of performance. This occurs because environments which suppress individual differences, have their greatest effect on the most able (through personality and/or ability) simply because the range of possible behaviors for those who are more able is greater (see Dunnette, 1965, p. 136). Situations, then, in which "appropriate" behavior is very rigidly defined suppress individual differences which leads to uniform, but low and individually unpredictable behavior. Such an hypothesis fits well with the thinking of theorists such as McGregor (1960) and Argyris (1957a) as well as with recent writings by more individual difference-oriented scholars such as Dunnette (1973).

Hypotheses about the effects of situational variables on individual attribute - individual behavior relationships are very rare, and not only in industrial-organizational psychology (Cronbach, 1957; Porter, 1966). In an impassioned plea, following an extensive review, Mischel (1968) wrote as

follows about the predictions of behavior based on the assessment of personality:

> "Although it is evident that persons are the source from which human responses are evoked, it is situational stimuli that evoke them, and it is changes in conditions that alter them. (p. 296)

Miscel went on to note that trait theories have assumed an unchanging individual, "branded by his infantile history", "driven by unconscious irrational forces" and destined to behave in each situation as he behaved in every other situation because personal traits are the determinant of personal behavior. Finally he states that

> "A more adequate conceptualization must take full account of man's extraordinary adaptiveness and capacities for discrimination, awareness and self-regulation...". (p. 301)

He reports the evidence for the interaction of personality and situation to be essentially non-existent and suggests that it is precisely when the situation is noncontrolling that individual attributes are reflected in individual behavior.

One study that has tested this kind of hypothesis was accomplished by Forehand and Guetzkow (Forehand, 1968, p. 67). They asked essentially the same question addressed here: "What makes an environment appropriate or inappropriate for the manifestation of a particular characteristic? An environment (a) may or may not demand manifestation of a trait (for example intelligence or aggressiveness) and (b) may or may not constrain such manifestation."

Forehand and Guetzkow developed a 25-item Organization Description questionnaire tapping the extent to which an organization is rules- or autonomy-oriented. Individual differences data were available on 120 people, 60 in the autonomy-centered and 60 in the rules-centered. Correlations with ratings of innovativeness were significant for eight of nine intellectual and cognitive measures under conditions promoting individual autonomy while none were significant under rules-centered conditions. For personality measures (EPPS), there were no meaningful differences between validity coefficients for the two groups.

Forehand (1968) concluded that approaching the study of climate from the point of view of individual differences "...provides some badly needed guidelines for selecting and defining environmental variables relevant to the study of climate (p. 75)." This argument fits well with our earlier statement about focussing on climates for particular kinds of behavior (leadership, turnover, and so forth) rather than creating the "omnibus" measure or "questionnairum climatum crucix". Forehand cited the research of Frederiksen, et al. (1972) as also supporting his hypothesis.

Frederiksen, et al. (1972) analyzed a wide range of individual differences variables as predictors of In-Basket performance in the different climates they established (see above). They found some differences in validity coefficients when moderating by climate and their results suggest the possibility that in settings oriented toward Innovation or Global Supervision higher correlations (regardless of the sign) between predictors and criteria may be expected. Thus,

in 7 of the 9 cases where significant differences in validity coefficients are reported between Rules/Innovation or Detailed/Global Supervision, the higher correlation is for Innovation or Global, both being conditions more suited to the display of individual differences according to the hypothesis stated above (see Frederiksen, et al., 1972, pp. 185-186 and p. 186 for cautions about over-interpreting these data).

Forehand (1968) suggested that there were a number of ways of conceptualizing the interaction between person and environment but that this interaction depended upon the availability of the environment in which to display the trait. Hall and Schneider (1973), following this line of thought hypothesized that people's self-esteem becomes tied to their work when they work in a situation characterized by (1) autonomy in setting work goals and (2) support for defining the paths to obtaining those goals; what they called supportive autonomy. Hall and Schneider showed that when people are in a situation of high supportive autonomy their self-esteem is correlated .44 with the challenge they find in their work; under lower supportive autonomy, correlations of .11 and .18 were reported (see pp. 205-209).

Dunnette (1973) has also recently summarized some research which suggests how the situation may depress relationships between personal variables and criterion variables. First Dunnette reviewed literature showing that various motivation theories typically account for a considerably lower proportion of variance in performance (in laboratory settings) than do various ability indices.

However, Dunnette reported that under some work conditions, notably when workers are equitably paid (Adams, 1963, 1965) and when workers are on an incentive pay system ability predicts performance (r's of .75-.80). Moreover, when men are changed from incentive to hourly pay, ability was uncorrelated with performance and when men work in an overreward condition (again, a condition not rewarding individual differences) ability is also not strongly related to performance.

Dunnette concluded that the formulation - performance equals ability times motivation - does not receive support and he asks "performance equals ability and what?" Our answer would be that performance equals ability and the support and reward for expressing the ability. Dunnette (1973, p. 25) concludes similarly that "An employer's major goal, quite simply, should be to do everything he can to assure ("allow") each employee to give full expression to his abilities, skills and aptitudes."

Schneider (1974) has recently found support for these ideas in a field setting. Following some earlier work on life insurance agency climate (Schneider, 1972; Schneider & Bartlett, 1968, 1970), Schneider clustered life insurance agencies on the basis of the perceptions of agency employees. During the year following the collection of climate data, the test scores of newly contracted agents and their eventual performance after one year on the job were tallied. Across all agencies the predictor-criterion correlation was .07. However, in four different clusters of agencies the correlations ranged from -.01 to .26. The .26 correlation was obtained in those agencies which were (1) highest on

supervisory support, concern for new employees, agent autonomy, agency morale; (2) lowest on intra-agency conflict; and (3) average on supervisory structure. [The low level of these correlations are a result of severely restricted range (Peterson & Wallace, 1966).]

As usual, it turns out that a similar study had been done 25 years earlier by Ferguson and Hopkins (1951; cited in Ronan & Prien, 1971), with similar results. Ferguson and Hopkins (1951) were interested in the proportion of people who succeed as life insurance agents as a function of the management quality of the agencies they join. They noted that it was logical to further assume that management quality should affect the accuracy of prediction possible with scores on the Aptitude Index (an early version of the Aptitude Index Battery used by Schneider, 1974). They defined management quality by a composite index of 15 variables including district production, conservation of business, and the quality of personnel (number of promotions, number of agents qualified for various honors and number of avoidable terminations).

They found that in high, medium and low management quality life insurance agencies, the Aptitude index correlated .38, .27, and .06 with a performance criterion, respectively. They concluded in a strikingly similar way to our present position that

> ". . . agent performance will fall most nearly in line with agent aptitude in those districts having a management capable of getting agents to perform at or near maximum capacity. In districts poorly or inadequately managed, agent performance is, in many instances, much less than that of maximum capacity. So the relation between capacity and performance is, in these latter districts, much attenuated" (Ferguson & Jenkins, 1951, p. 150)

Another situation in which one typically finds high levels of support and concern for new employees as well as low levels of conflict, and in which employees are asked to do their best, is the training situation in industry. Ghiselli (1966) has shown that the prediction of training criteria with aptitude tests is consistently superior to the prediction of on-the-job criteria. While such data may reflect the fact that training criteria are more reliable, they may also be a result of the climate created in the training situation which encourages the display of individual differences.

No one of these studies, or all taken together, provide clear support for the hypothesis that performance is more predictable under conditions promoting the display of individual differences, but the evidence is very suggestive. Indeed one may speculate further that in addition to providing a climate for individual differences to be displayed, a combination of support, autonomy, equitable reward for effort, global and innovative orientation, and by supporting and rewarding individual differences conditions are created in which people perceive that the appropriate adaptation strategy is to "do your best".

"Do your best" may imply the display of individual differences in two broad categories, ability and personality. We can hypothesize that the general failure of personality tests as predictors in industry, as compared to the success of ability measures (Ghiselli, 1966; Guion, 1965), is due to the increased vulnerability of personality to situational cues (Mischel, 1968). It may be that most industrial situations provide so many cues that suggest the most appropriate behavior is common behavior that people with considerable personality differences still behave relatively alike resulting in low behavior

variance and thus poor validity coefficients. Additional hypotheses for the failure, of course, are poorly designed measures, or, a more likely hypothesis is that the personality measures used to predict job behavior are typically not job relevant (Campbell, et al., 1970; Guion, 1965). Non-job relevance combined with depressed variance in behavior due to situational demands for particular behaviors help explain lack of predictive validity for such personality measures (see Litwin & Stringer, 1968 and Stern, 1970 for alternative approaches).

"Do your best" so far as ability tests are concerned is precisely the response-set under which ability tests are administered (these tests are even called maximum performance tests). If people taking such tests do perform at maximum levels and if the job situation does not similarly require them to do their best then the testing situation is requiring a kind of behavior the job situation does not require. Such differences between the test and job situation might very well serve to depress validity coefficients.

Summary. Research has been cited supporting the Functionalist view of adaptation as an explanatory concept for the impact of climate perceptions on behavior. The view proposed here is that individuals need information from their environment so they know the behaviors required by the organization that will help them attain a homeostatic balance with their environment. A hypothesis was proposed that the desire to adapt was depressive of the display of individual differences unless the climate rewarded and/or supported and in other ways provided for the display of such differences. Some evidence sup-

porting this idea was presented. These data suggested the necessity to rethink the idea the B = f(P,E) in favor of a conditional model which suggests that B = f(P,E) given that E encourages the display of individual differences. Some organizational conditions meeting this criterion are: differential reward systems, equitable reward systems, encouraging innovation, supportive leadership, concern for new workers, and autonomy at work - generally the conditions espoused by current organizational theorists. It was also suggested that the impact of "modern" management theories on increasing levels of worker performance is due to the increased display of individual differences such management strategies encourage. This led to the additional idea that the validity of ability and personality tests in industry may be depressed by situational conditions inhibiting the display of the very individual differences being assessed as predictors of future behavior.

Summary and Conclusion

In Part I of this paper conceptual and methodological distinctions between climate and satisfaction were made. The discussion revolved around two major foci: description versus evaluation, and individual versus organizational differences. It was shown that job satisfaction research has its roots in the attitude literature with major emphasis on how individuals evaluate elements in, and outcomes from, their environments. Conversely, organiza-

tional climate research was shown to be primarily concerned with (or should be primarily concerned with) the description of organizational differences as perceived by members of those organizations.

A definition of organizational climate as shared concepts people have about their organization which function to adapt them to those environments opened Part II of the paper. First we showed that people probably have many concepts about their organization and that with reference to any of those concepts one may speak of "amount" of climate.

Then some of the major ideas of each of three "schools" of psychology were presented with summaries of climate research that fit the school. Ideas from Structuralism were shown to: (1) be well represented in designing questionnaire measures of climate (analyzing wholes into their elements); (2) suggest that emphasis on the physical properties of organizations for describing climate was not psychologically meaningful; (3) indicate that little research has been accomplished on understanding how elements of an organization's practices and procedures combine to form concepts ("hue", "saturation") and how relationships between concepts ("across modalities") occur and what their implications may be.

Gestalt psychology was shown to have had great impact on the study of climates. Support in the climate literature was found for the ideas that: (1) people create meaningful concepts about a situation based on the perceptions they have; (2) the created concepts are shared by members in the same situation; (3) people behave in ways that fit their conceptions of the prevailing climate(s) they perceive.

Functionalism received the largest proportion of space. First, Functionalism was shown to offer an answer to the question "why have climate perceptions." It was suggested that the answer was based on the very functional idea of adaptation; people have climate perceptions because such perceptions function as a "ground" against which behavior is judged for its appropriateness in the situation in which the person finds him or herself. Evidence to support such an adaptation hypothesis was presented.

Acceptance of the adaptation hypothesis had important implications for another major contribution of Functionalism, the study of individual differences and the prediction of individual performance in organizations. It was hypothesized that if organizations do not value individual differences by supporting, rewarding and expecting them, then real differences between people would not become manifest in the situation. This lack of manifestation of individual differences in behavior would result in depressed validity coefficients between tests (of ability and personality) and performance. Considerable evidence to support this hypothesis was presented.

It may be concluded that just as people form concepts about other aspects of their world, they conceptualize the organizations in which they participate. We have suggested that forming these concepts is natural and that the meaningfulness of a concept is a function of the cues used as a basis for it. Organizations are thus responsible for providing the cues on which members base their concepts. The important point here is that evidence suggests people behave on the basis of these concepts they form and that the ability to predict how they will behave may be a direct function of the extent to which they conceptualize their organization as one which provides a "climate for individual differences."

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FOOTNOTES

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2. At this writing on leave as a Fulbright scholar, Bar-Ilan University, Ramat-Gan, Israel.

3. Some of the ideas presented in this Part of the paper were reported at the Midwestern Psychological Association Annual Convention, Chicago, 1973 and at a Conference on the Older Engineer, South Berwick, Maine, 1973 (see Schneider, 1973 b and 1973 c, respectively).

4. A comment by Roger McIntire in a conversation we were having and a paper delivered by Epstein (1973) at the University of Maryland in 1972 started me down this path.

5. Among organizational psychologists Lewin is probably best known for his view that Behavior is a Function of Person and Environment [$B = f(P,E)$]. This hypothesized interaction of person and situation will be considered in a separate section under the school of Functionalism.

6. This is an issue addressed when we discuss Functionalism.

7. There is evidence provided by Beer (1971) and Greiner, Leitch and Barnes (1968) to contradict this distinction.

8. Schlesinger (1973, p. 44) quotes Jeb Stuart Magruder on Watergate: "Because of a certain atmosphere that had developed in my working at the White House, I was not as concerned about its illegality as I should have been."

9. The issue of the development and change of perceptions of organizational climates requires the complete attention of a separate paper. At this point we can simply note that if climate conceptions are based on "events, conditions, practices and procedures" then early perceptions of such cues (as in recruitment and selection) will play an important role in defining climate perceptions because they come early in the development of the perceptions; this argument receives some support in research by Hall and Schneider (1973). Secondly, if organizations desire to change the climates employees perceive, they will have to change the "events, practices and procedures" their employees perceive (c.f. Seashore & Powers, 1970).